LAB 3

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LAB: CSE4002 Mobile Application Development LAB

Design an COVID APP to get the symptoms and analyse it to print the diagnostic result. Assume your condition for covid, cough and fever and display the result in mainActivity2.

MainActivity.Java

```
package com.example.lab3;


import androidx.appcompat.app.AppCompatActivity;


import android.content.Intent;

import android.os.Bundle;

import android.util.Log;

import android.view.View;

import android.widget.Button;

import android.widget.CheckBox;

import android.widget.EditText;

import android.widget.Toast;


import java.util.ArrayList;
```

```java
public class MainActivity extends AppCompatActivity {

    EditText name,place,aadhar;

    Button submit,clear;

    CheckBox cold,fever,cough,noSmell,vomit;

    String diag;


    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        submit=findViewById(R.id.submit);

        clear=findViewById(R.id.clear);

        name=findViewById(R.id.name);

        place=findViewById(R.id.place);

        aadhar=findViewById(R.id.aadhar);

        cold=findViewById(R.id.cold);

        cough=findViewById(R.id.cough);

        fever=findViewById(R.id.fever);

        noSmell=findViewById(R.id.noSmell);

        vomit=findViewById(R.id.vomit);

        ArrayList<CheckBox> selectCb=new ArrayList<>();

        selectCb.add(cold);

        selectCb.add(cough);

        selectCb.add(fever);

        selectCb.add(noSmell);
```

```java
        selectCb.add(vomit);

        submit.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                if(cold.isChecked() && cough.isChecked() && !noSmell.isChecked()
&& !fever.isChecked() && !vomit.isChecked()){

                    diag="Normal Cold";

                }

                else if(cold.isChecked() && cough.isChecked() &&
noSmell.isChecked() && !fever.isChecked() && !vomit.isChecked()){

                    diag="COVID";

                }

                else if(!cold.isChecked() && !cough.isChecked() &&
!noSmell.isChecked() && fever.isChecked() && vomit.isChecked()){

                    diag="Normal Fever";

                }

                sendDetailIntent(v);


            }

        });


        clear.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                name.getText().clear();

                place.getText().clear();

                aadhar.getText().clear();
```

```java
            for (CheckBox cb:selectCb

            ) {

                if(cb.isChecked()){

                    System.out.println(cb.getText().toString());

                    cb.setChecked(false);}

            }

        }

    });


}


public void sendDetailIntent(View v){

    String cbDet="\n";

    ArrayList<CheckBox> selectCb=new ArrayList<>();

    selectCb.add(cold);

    selectCb.add(cough);

    selectCb.add(fever);

    selectCb.add(noSmell);

    selectCb.add(vomit);

    Intent detail=new Intent(getApplicationContext(), MainActivity2.class);

    Bundle b=new Bundle();

    b.putString("name",name.getText().toString());

    b.putString("diag",diag);

    b.putString("place",place.getText().toString());

    b.putString("ad",aadhar.getText().toString());
```

```java
        for (CheckBox cb:selectCb){

            if (cb.isChecked()){

                cbDet = cbDet + cb.getText().toString()+"\n";

            }

        }

        b.putString("cb",cbDet);

        detail.putExtras(b);

        startActivity(detail);

    }

}
```

XML Code

```xml
<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"

    xmlns:app="http://schemas.android.com/apk/res-auto"

    xmlns:tools="http://schemas.android.com/tools"

    android:id="@+id/in"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    tools:context=".MainActivity">


    <TextView

        android:id="@+id/textView"

        android:layout_width="wrap_content"
```

```xml
        android:layout_height="wrap_content"

        android:layout_marginStart="32dp"

        android:layout_marginLeft="32dp"

        android:layout_marginTop="120dp"

        android:text="@string/name"

        app:layout_constraintEnd_toStartOf="@+id/name"

        app:layout_constraintHorizontal_bias="0.0"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent" />


    <EditText

        android:id="@+id/name"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginTop="112dp"

        android:layout_marginEnd="72dp"

        android:layout_marginRight="72dp"

        android:ems="10"

        android:inputType="textPersonName"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        android:autofillHints="" />


    <EditText

        android:id="@+id/place"

        android:layout_width="wrap_content"
```

```xml
        android:layout_height="wrap_content"

        android:layout_marginTop="32dp"

        android:layout_marginEnd="72dp"

        android:layout_marginRight="72dp"

        android:ems="10"

        android:inputType="textPersonName"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/name" />


    <EditText

        android:id="@+id/aadhar"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginTop="28dp"

        android:layout_marginEnd="68dp"

        android:layout_marginRight="68dp"

        android:ems="10"

        android:inputType="textPersonName"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/place"

        app:layout_constraintVertical_bias="0.023" />


    <TextView

        android:id="@+id/textView2"

        android:layout_width="wrap_content"
```

```xml
        android:layout_height="wrap_content"

        android:layout_marginStart="32dp"

        android:layout_marginLeft="32dp"

        android:layout_marginTop="60dp"

        android:text="Place:"

        app:layout_constraintEnd_toStartOf="@+id/place"

        app:layout_constraintHorizontal_bias="0.0"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/textView" />


    <TextView

        android:id="@+id/textView3"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginStart="24dp"

        android:layout_marginLeft="24dp"

        android:layout_marginTop="60dp"

        android:text="Aadhar"

        app:layout_constraintBottom_toTopOf="@+id/textView4"

        app:layout_constraintEnd_toStartOf="@+id/aadhar"

        app:layout_constraintHorizontal_bias="0.137"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/textView2"

        app:layout_constraintVertical_bias="0.0" />


    <TextView
```

```
        android:id="@+id/textView4"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginTop="340dp"

        android:text="Symptoms"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.093"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent" />


    <CheckBox

        android:id="@+id/cold"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Cold"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.654"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.585" />


    <CheckBox

        android:id="@+id/cough"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"
```

```xml
        android:layout_marginTop="400dp"

        android:text="Cough"

        app:layout_constraintBottom_toTopOf="@+id/fever"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.153"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.0" />


    <CheckBox

        android:id="@+id/fever"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Fever"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.151"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.685" />


    <CheckBox

        android:id="@+id/noSmell"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="No Smell"
```
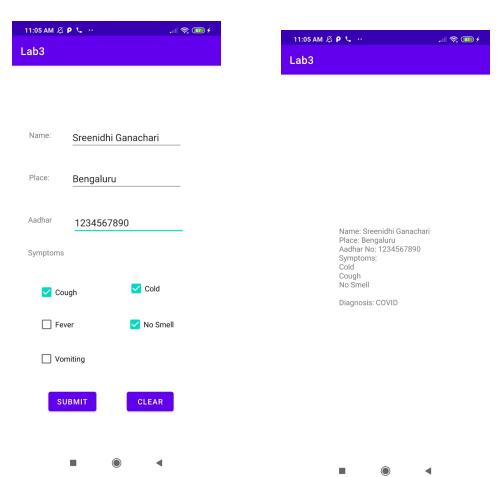
```xml
        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.708"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.685" />


<CheckBox

        android:id="@+id/vomit"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Vomiting"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.16"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.781" />


<Button

        android:id="@+id/submit"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Submit"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"
```

```xml
        app:layout_constraintHorizontal_bias="0.226"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.9" />


    <Button

        android:id="@+id/clear"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Clear"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.708"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.9" />


</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity2.java

```java
package com.example.lab3;


import androidx.appcompat.app.AppCompatActivity;


import android.content.Intent;

import android.os.Bundle;
```

```java
import android.widget.TextView;


public class MainActivity2 extends AppCompatActivity {

    TextView render;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main2);

        render=findViewById(R.id.render);

        Intent getDetail=getIntent();

        Bundle b=getDetail.getExtras();

        String s="Name: "+b.getString("name")+"\nPlace: "+b.getString("place")+"\nAadhar No: "+b.getString("ad")+"\nSymptoms: "+b.getString("cb")+"\nDiagnosis: "+b.getString("diag");

        render.setText(s);

    }

}
```

XML Code

```xml
<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"

    xmlns:app="http://schemas.android.com/apk/res-auto"

    xmlns:tools="http://schemas.android.com/tools"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    tools:context="MainActivity2">
```

```xml
    <TextView

        android:id="@+id/render"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="TextView"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

OUTPUT

Name: Sreenidhi Ganachari

Place: Bengaluru

Aadhar   1234567890

Symptoms

- ☑ Cough   ☑ Cold
- ☑ Fever   ☑ No Smell
- ☐ Vomiting

SUBMIT   CLEAR

Name: Sreenidhi Ganachari
Place: Bengaluru
Aadhar No: 1234567890
Symptoms:
Cold
Cough
Fever
No Smell

Diagnosis: null